# Products...FEA...Overview

# **Table of contents**

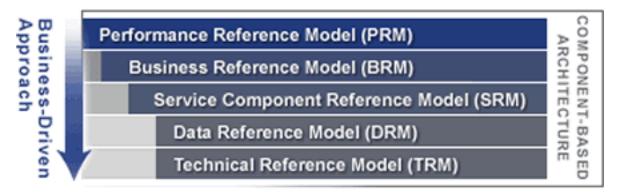
1 Overview	2
1.1 Federal Enterprise Architecture (FEA)	2
1.2 Performance Reference Model (PRM)	
1.3 Business Reference Model (BRM)	
1.4 Service Component Reference Model (SRM)	
1.5 Data Reference Model (DRM)	
1.6 Technical Reference Model (TRM)	

#### 1. Overview

#### 1.1. Federal Enterprise Architecture (FEA)

To facilitate efforts to transform the Federal Government to one that is citizen-centered, results-oriented, and market-based, the Office of Management and Budget (OMB) is developing the Federal Enterprise Architecture (FEA), a business-based framework for Government-wide improvement.

The FEA consists of a set of interrelated "reference models" designed to facilitate cross-agency analysis and the identification of duplicative investments, gaps and opportunities for collaboration within and across agencies. Collectively, the reference models comprise a framework for describing important elements of the FEA in a common and consistent way. Through the use of this common framework and vocabulary, IT portfolios can be better managed and leveraged across the federal government.



Reference(s):

• a-2-EAModelsNEW2.html

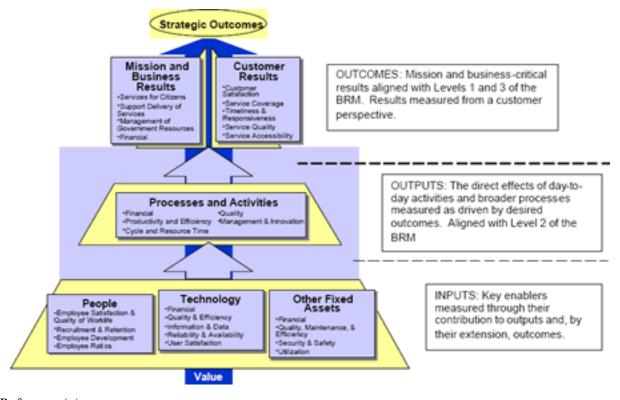
#### 1.2. Performance Reference Model (PRM)

The PRM is a framework for performance measurement providing common output measurements throughout the federal government. It allows agencies to better manage the business of government at a strategic level, by providing a means for using an agency's EA to measure the success of IT investments and their impact on strategic outcomes. The PRM accomplishes these goals by establishing a common language by which agency EAs can describe the outputs and measures used to achieve program and business objectives. The model articulates the linkage between internal business components and the achievement of business and

customer-centric outputs. Most importantly, it facilitates resource-allocation decisions based on comparative determinations of which programs and organizations are more efficient and effective. The PRM focuses on three main objectives:

- Help produce enhanced performance information to improve strategic and daily decision making
- Improve the alignment and better articulate the contribution of inputs to outputs, thereby creating a clear "line of sight" to desired results
- Identify performance improvement opportunities that span traditional organizational structures and boundaries

The PRM structure is designed to clearly express the cause—and-effect relationship between inputs and outputs. This "line of sight" is articulated through the use of the Measurement Area, Category, Grouping, and Indicator hierarchy.



### Reference(s):

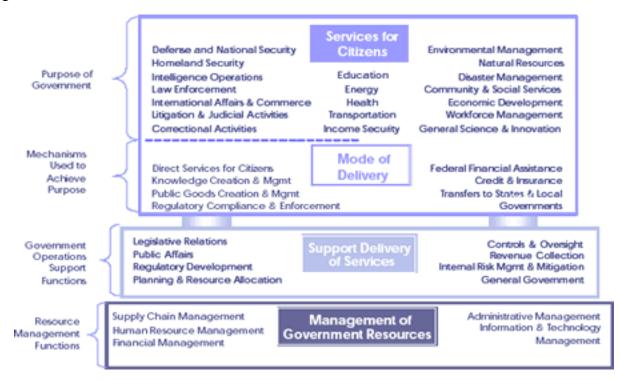
• a-2-prm.html

#### 1.3. Business Reference Model (BRM)

The BRM provides a framework that facilitates a functional (rather than organizational) view of the federal government's lines of business (LoBs), including its internal operations and its services for citizens, independent of the agencies, bureaus and offices that perform them. The BRM describes the federal government around common business areas instead of through a stove-piped, agency-by-agency view. It thus promotes agency collaboration and serves as the underlying foundation for the FEA and E-Gov strategies.

While the BRM does provide an improved way of thinking about government operations, its true utility as a model can only be realized when agencies effectively use it. The functional approach promoted by the BRM will do little to help accomplish the E-Gov strategic goals if it is not incorporated into business-focused enterprise architectures and the management processes of federal agencies and OMB .

The BRM is structured into a tiered hierarchy representing the business functions of the federal government.



#### Reference(s):

• a-3-brm.html

## 1.4. Service Component Reference Model (SRM)

The SRM is a business-driven, functional framework classifying Service Components according to how they support business and performance objectives. It serves to identify and classify horizontal and vertical Service Components supporting federal agencies and their IT investments and assets. The model aids in recommending service capabilities to support the reuse of business components and services across the federal government.

The SRM is organized across horizontal service areas, independent of the business functions, providing a leverage-able foundation for reuse of applications, application capabilities, components, and business services.

Service Domains	Service Types
Customer Services	Customer Relationship Management Customer Preferences Customer Initiated Assistance
Process Automation	Tracking and Workflow Routing and Scheduling
Business Management Services	Management of Process Organizational Management Investment Management Supply Chain Management
Digital Asset Services	Content Management Document Management Knowledge Management Records Management
Business Analytical Services	Analysis and Statistics
Back Office Services	Data Management Development and Integration Human Resources Financial Management Asset / Materials Management
Support Services	Security Management

Reference(s):

#### • a-4-srm.html

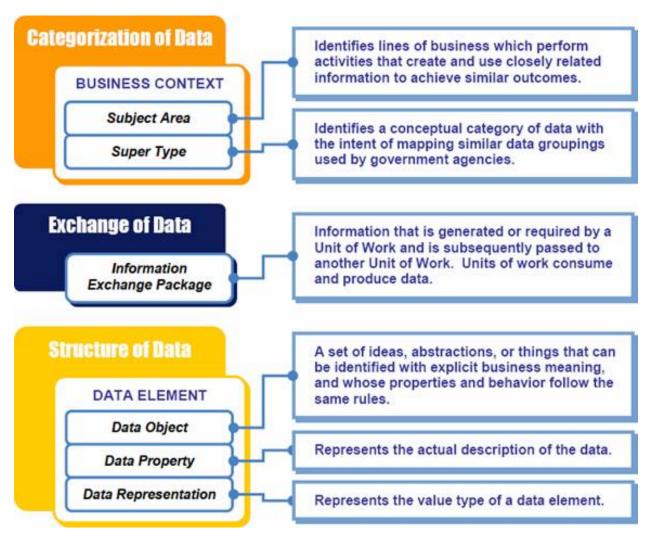
#### 1.5. Data Reference Model (DRM)

The FEA Data Reference Model (DRM) is intended to promote the common identification, use, and appropriate sharing of data/information across the federal government through its standardization of data in the following three areas:

- Data Context A standard approach to representing taxonomies that an agency uses to categorize its data. Such categorization enables the business context of data to be well understood.
- Data Sharing A standard approach to describing the characteristics and requirements of interagency data exchanges, including data sources. Defines a standard message structure known as an Information Exchange Package.
- Data Description A standard approach to describing an agency's structured, semistructured, and unstructured data. Structured data includes individual entities (such as those defined within a data architecture), their attributes, and the relationships between them. Unstructured data includes multimedia files, and documents created using earlier versions of applications such as Microsoft Word. Semi-structured data includes Web pages and e-mails.

In order to facilitate implementation of the DRM by federal agencies, OMB will provide agencies with a DRM Schema (also known as a "DRM XML Profile"). The DRM Schema will enable federal agencies to submit XML instances to OMB that contain information for the agency pertaining to the three DRM areas described above. The DRM Schema will also facilitate data modeling efforts within agencies by providing a capability by which – for example – physical data models may be derived from logical data models. Instances of the DRM Schema may also potentially be used for configuration and operational purposes (e.g., to automatically configure and/or categorize a data source, to support service-oriented architecture (SOA) based exchanges between agencies, etc.).

The current published version of the DRM is undergoing revision. The FEA PMO is collaborating with members of the interagency DRM working group, chartered by the AIC, to further enhance and improve this reference model. The DRM structure described above is the updated description of the DRM based on the work being done by the FEA PMO and the interagency DRM working group. Because the new version of the DRM has not been completed, the latest published version is provided in this document for reference.



Reference(s):

• a-5-drm.html

#### 1.6. Technical Reference Model (TRM)

The TRM is a component-driven, technical framework categorizing the standards and technologies to support and enable the delivery of Service Components and capabilities. It also unifies existing agency TRMs and E-Gov guidance by providing a foundation to advance the reuse and standardization of technology and Service Components from a government-wide

#### perspective.

Aligning agency capital investments to the TRM leverages a common, standardized vocabulary, allowing interagency discovery, collaboration, and interoperability. Agencies and the federal government will benefit from economies of scale by identifying and reusing the best solutions and technologies to support their business functions, mission, and target architecture. Organized in a hierarchy, the TRM categorizes the standards and technologies that collectively support the secure delivery, exchange, and construction of business and application Service Components that may be used and leveraged in a component-based or service-oriented architecture (CBA or SOA, used synonymously from here forward). The TRM consists of:

- Service Areas represent a technical tier supporting the secure construction, exchange, and delivery of Service Components. Each Service Area aggregates the standards and technologies into lower-level functional areas. Each Service Area consists of multiple Service Categories and Service Standards. This hierarchy provides the framework to group standards and technologies that directly support the Service Area.
- Service Categories classify lower levels of technologies and standards with respect to the business or technology function they serve. In turn, each Service Category is comprised of one or more Service Standards.
- Service Standards define the standards and technologies that support a Service Category. To support agency mapping into the TRM, many of the Service Standards provide illustrative specifications or technologies as examples.

Service Access and Delivery					
Access Channels	Delivery Channels	Service Requirements	Service Transport		
Web Browser	Internet	Legislative / Compliance	Supporting Network Services		
Wireless / PDA	Intranet	Authentication / Single Sign-on	Service Transport		
Collaboration / Communications	Extranet	Hosting			
Other Electronic Channels	Peer to Peer (P2P)				
	Virtual Private Network (VPN)				
Service Platform and Infrastructure					
Support Platforms	Delivery Servers		Hardware / Infrastructure		
Wireless / Mobile	Web Servers	Web Servers			
Platform Independent	Media Servers		Embedded Technology Devices		
Platform Dependent	Application Servers		Peripherals		
Software Engineering	Portal Servers		Wide Area Network (WAN)		
Integrated Dev.Environment	Database / Storage		Local Area Network (LAN)		
Software Configuration Mgmt	Database		Network Devices / Standards		
Test Management	Storage		Video Conferencing		
Modeling					
Component Framework					
Security	Presentation / Interface	Business Logic	Data Management		
Certificates / Digital Signature	Static Display	Platform Independent	Database Connectivity		
Supporting Security Services	Dynamic Server-Side Display	Platform Dependent	Reporting and Analysis		
	Content Rendering	Data Interchange			
	Wireless / Mobile / Voice	Data Exchange			
Service Interface and Integration					
Integration	Interoperability		Interface		
Middleware	Data Format / Classification		Service Discovery		
Enterprise Application Integration	Data Types / Validation		Service Description / Interface		
Data Transformation					

# Reference(s):

• a-6-trm.html